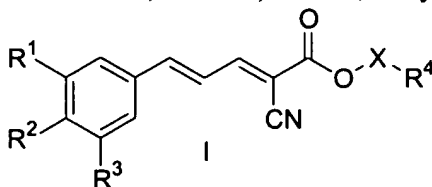


AMENDMENTS TO THE CLAIMS

1. (Original) A compound of Formula I, or a salt, solvate, or hydrate thereof



wherein

R^1 , R^2 and R^3 are each independently selected from H, OH, C_{1-6} alkyl, C_{1-6} alkoxy, C_{1-6} alkylCO₂, NH₂, NH- C_{1-6} alkyl, N(C_{1-6} alkyl)(C_{1-6} alkyl), C_{1-6} alkyl(C=O)NH, C_{1-6} alkyl(C=O)N(C_{1-6} alkyl), SH, S- C_{1-6} alkyl, NO₂, CF₃, OCF₃ and halo;

R^4 is unsubstituted Ar, or Ar substituted with 1-4 substituents, independently selected from C_{1-6} alkyl, C_{1-6} alkoxy, and halo;

X is selected from (CH₂CH₂O)_n and (CH₂)_n, and

$n = 1-4$.

2. (Original) The compound according to claim 1, wherein

R^1 , R^2 and R^3 are each independently selected from H, OH, C_{1-4} alkyl, C_{1-4} alkoxy, C_{1-4} alkylCO₂, NH₂, NH- C_{1-4} alkyl, N(C_{1-4} alkyl)(C_{1-4} alkyl), C_{1-4} alkyl(C=O)NH, C_{1-4} alkyl(C=O)N(C_{1-4} alkyl), NO₂, CF₃, OCF₃, and halo;

R^4 is C_{1-6} alkyl,

X is (CH₂CH₂O)_n, and

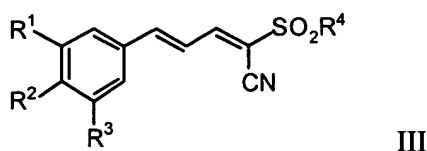
$n = 1-4$.

3. (Original) The compound according to claim 1 or 2, wherein R^1 , R^2 , and R^3 are each independently selected from H, OH, C_{1-4} alkyl, C_{1-4} alkoxy, C_{1-4} alkyl(CO)O, NH₂, NH- C_{1-4} alkyl, N(C_{1-4} alkyl)(C_{1-4} alkyl), C_{1-4} alkyl(C=O)NH, C_{1-4} alkyl(C=O)N(C_{1-4} alkyl), NO₂, CF₃, OCF₃, and halo.

4. (Original) The compound according to claim 3, wherein R^1 , R^2 and R^3 are each independently selected from H, OH, OCH₃, CH₃CO₂, NH₂, N(CH₃)₂, CH₃CONH, and NO₂.

5. (Original) The compound according to claim 4, wherein R¹, R², and R³ are each independently selected from H, OH, and OCH₃.
6. (Original) The compound according to claim 1, wherein R⁴ is unsubstituted Ar.
7. (Original) The compound according to claim 6, wherein R⁴ is phenyl.
8. (Original) The compound according to claim 2, wherein R⁴ is methyl or ethyl.
9. (Original) The compound according to claim 8, wherein R⁴ is methyl.
10. (Original) The compound according to claim 9, wherein n is 2-3.
11. (Original) The compound according to claim 10, wherein n is 3.
12. (Original) A compound selected from:
2-Cyano-5-(4-hydroxy-3,5-dimethoxyphenyl)-penta-2E,4E-dienoic acid benzyl ester (CRIX-38)
2-Cyano-5-(3,4-dihydroxyphenyl)-penta-2E,4E-dienoic acid benzyl ester (CRIX-39)
2-Cyano-5-(3,4-dihydroxyphenyl)-penta-2E,4E-dienoic acid 2-[2-(2-methoxyethoxy)ethoxy]
ethyl ester (CRIV-42)
2-Cyano-5-(4-hydroxy-3,5-dimethoxyphenyl)-penta-2E,4E-dienoic acid 2-[2-(2-
methoxyethoxy)ethoxy]ethyl ester (CRIV-46); and
2-Cyano-5-(4-hydroxy-3-methoxyphenyl)-penta-2E,4E-dienoic acid benzyl ester (CRIX-79).
13. (Currently Amended) A composition comprising a compound according to ~~any one of~~ claims 1 to 12 in admixture with a pharmaceutically acceptable diluent or carrier.
- 14-16. (Cancelled).
17. (Currently Amended) A method of modulating cell proliferation comprising administering an effective amount of a compound according to ~~any of~~ claims 1-12, ~~and/or~~ a composition according to claim 13, to a cell or animal in need thereof.

18. (Original) The method according to claim 17, for inhibiting cell proliferation.
19. (Original) The method according to claim 18 wherein the cell is a malignant hematopoietic cell.
20. (Original) A compound of Formula III, or a salt, solvate, or hydrate thereof:



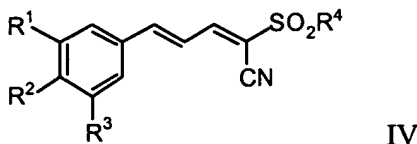
wherein

R^1 , R^2 and R^3 are each independently selected from H, OH, C_{1-6} alkyl, C_{1-6} alkoxy, C_{1-6} alkylCO₂, NH₂, NH- C_{1-6} alkyl, N(C_{1-6} alkyl)(C_{1-6} alkyl), C_{1-6} alkyl(C=O)NH, C_{1-6} alkyl(C=O)N(C_{1-6} alkyl), SH, S- C_{1-6} alkyl, NO₂, CF₃, OCF₃, and halo; and

R^4 is selected from C_{1-6} alkyl, phenyl and pyridyl, wherein phenyl and pyridyl are unsubstituted or substituted with 1-4 substituents, independently selected from C_{1-6} alkyl, C_{1-6} alkoxy and halo, with the provisos that when R^1 and R^3 are both H and R^4 is unsubstituted phenyl, R^2 is not H, Cl, or OCH₃; when R^1 and R^2 are both H and R^4 is unsubstituted phenyl, R^3 is not NO₂; and when R^1 and R^3 are both H and R^4 is CH₃, R^2 is not N(CH₃)₂.

21. (Original) The compound according to claim 1, wherein R^1 , R^2 and R^3 are each independently selected from H, OH, C_{1-4} alkyl, C_{1-4} alkoxy, C_{1-4} alkylCO₂, NH₂, NH- C_{1-4} alkyl, N(C_{1-4} alkyl)(C_{1-4} alkyl), C_{1-4} alkyl(C=O)NH, C_{1-4} alkyl(C=O)N(C_{1-4} alkyl), NO₂, CF₃, OCF₃, and halo.
22. (Original) The compound according to claim 21, R^1 , R^2 and R^3 are each independently selected from H, OH, OCH₃, CH₃CO₂, NH₂, N(CH₃)₂, CH₃CONH, and NO₂.
23. (Original) The compound according to claim 20, wherein R^4 is selected from C_{1-4} alkyl, phenyl, and pyridyl.
24. (Original) The compound according to claim 23, wherein R^4 is selected from CH₃ and phenyl.

25. (Original) The compound according to claim 24, wherein R⁴ is unsubstituted phenyl.
26. (Original) The compound according to claim 20, wherein phenyl and pyridyl are unsubstituted or substituted with 1-3 substituents, independently selected from C₁₋₄alkyl, C₁₋₄alkoxy, and halo.
27. (Original) The compound according to claim 24, wherein phenyl is unsubstituted or substituted with 1-2 substituents, independently selected from C₁₋₄alkyl, C₁₋₄alkoxy, and halo.
28. (Original) The compound according to claim 20, wherein at least one of R¹, R² and R³ is OH while R⁴ is selected from unsubstituted phenyl and phenyl substituted with 1-4 substituents, independently selected from C₁₋₆alkyl, C₁₋₆alkoxy, and halo.
29. (Original) A compound selected from:
2-Benzenesulfonyl-5-(3,4-dihydroxyphenyl)-penta-2E,4E-dienitrile (CRVIII-33),
2-Benzenesulfonyl-5-(4-hydroxy-3,5-dimethoxyphenyl)-penta-2E,4E-dienitrile (CRVIII-34),
2-Benzenesulfonyl-5-(4-nitrophenyl)-penta-2E,4E-dienitrile (CRVIII-35),
5-(4-Acetoxy-3-methoxyphenyl)-2-benzenesulfonyl-penta-2E,4E-dienitrile (CRVIII-49)
5-(3,4-Dihydroxyphenyl)-2-(pyridine-2-sulfonyl)-penta-2E,4E-dienitrile (CRVIII-50),
2-(4-Chlorobenzenesulfonyl)-5-(3,4-dihydroxyphenyl)-penta-2E,4E-dienitrile (CRVIII-51),
5-(3,4-Dihydroxyphenyl)-2-(toluene-4-sulfonyl)-penta-2E,4E-dienitrile (CRVIII-52), and
5-(3,4-Dihydroxyphenyl)-2-methanesulfonyl-penta-2E,4E-dienitrile (CRVIII-53).
30. (Currently Amended) A composition comprising a compound according to ~~any one of~~ claims 20 ~~to 29~~ in admixture with a pharmaceutically acceptable diluent or carrier.
31. (Original) A composition comprising, in admixture with a pharmaceutically acceptable diluent or carrier, a compound of Formula IV, or a salt, solvate, or hydrate thereof



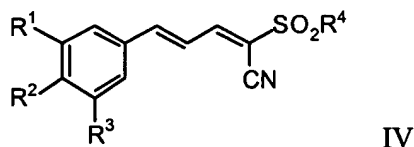
wherein

R^1 , R^2 and R^3 are each independently selected from H, OH, C_{1-6} alkyl, C_{1-6} alkoxy, C_{1-6} alkylCO₂, NH₂, NH- C_{1-6} alkyl, N(C_{1-6} alkyl)(C_{1-6} alkyl), C_{1-6} alkyl(C=O)NH, C_{1-6} alkyl(C=O)N(C_{1-6} alkyl), SH, S- C_{1-6} alkyl, NO₂, CF₃, OCF₃, and halo; and

R^4 is selected from C_{1-6} alkyl, phenyl and pyridyl, wherein phenyl and pyridyl are unsubstituted or substituted with 1-4 substituents, independently selected from C_{1-6} alkyl, C_{1-6} alkoxy, and halo.

32-34. (Cancelled).

35. (Currently Amended) A method of modulating cell proliferation comprising administering to a cell or animal in need thereof an effective amount of a composition according to ~~any of claims 30 and or 31, and/or~~ a compound capable of modulating cell proliferation of Formula IV, or a salt, solvate or hydrate thereof:



wherein

R^1 , R^2 and R^3 are each independently selected from H, OH, C_{1-6} alkyl, C_{1-6} alkoxy, C_{1-6} alkylCO₂, NH₂, NH- C_{1-6} alkyl, N(C_{1-6} alkyl)(C_{1-6} alkyl), C_{1-6} alkyl(C=O)NH, C_{1-6} alkyl(C=O)N(C_{1-6} alkyl), SH, S- C_{1-6} alkyl, NO₂, CF₃, OCF₃, and halo; and

R^4 is selected from C_{1-6} alkyl, phenyl and pyridyl, wherein phenyl and pyridyl are unsubstituted or substituted with 1-4 substituents, independently selected from C_{1-6} alkyl, C_{1-6} alkoxy, and halo.

36. (Original) The method according to claim 35, for inhibiting cell proliferation.

37. (Original) The method according to claim 36, wherein the cell is a malignant hematopoietic cell.